Upper Ohoopee River Watershed Cluster
TMDL Implementation Plan Narrative
Johnson and Emanuel Counties, Georgia

Introduction

Two segments of the Ohoopee River (Dyers Creek to Big Cedar Creek and Neels Creek to the Little Ohoopee River) and Big Cedar Creek have been listed as impaired water bodies on the State of Georgia's 303(d) list of impaired waters due to the presence of fecal coliform bacteria. Because of the recent drought, the water bodies have become intermittent streams. The lack of consistent water flow and the resultant high water temperatures of remaining pools of stagnant water has no doubt contributed to water quality problems of fecal coliform bacteria. There was some question about the extent, if any, of the real problem. Locals at the public meeting noted several factors that could possibly contribute to the problem of fecal coliform. Locals mentioned that there are several illegal dumping sites in the watershed area, and that there could possibly be some sewage runoff from septic tanks in the watershed. Also, locals believe that there is a problem with beaver dams in the watershed. While there is a general understanding and willingness to help improve water quality, these local concerns over the true nature of the water quality issues in the Ohoopee River (Dyers Creek to Big Cedar Creek and Neels Creek to the Little Ohoopee River) and Big Cedar Creek will have to be addressed to obtain acceptance and support of the TMDL Implementation Plans. The TMDL Implementation Plans concentrate on educating the public about non-point sources of water pollution and encouraging the use of best management practices at the agriculture, forestry, and urban and residential levels. Reduction of bacteria entering the Ohoopee River (Dyers Creek to Big Cedar Creek) by 95.2%, Ohoopee River (Neels Creek to the Little Ohoopee River) by 90.8%, and Big Cedar Creek by 83.1%, will no doubt make for better water quality regardless. A more involved and in-depth monitoring program can also help better define the issues and resolve any local concerns.

Background and Purpose

The Ohoopee River (Dyers Creek to Big Cedar Creek), lying in Johnson County, is in the Upper Altamaha River Basin and eventually flows into the Altamaha River. The 15-mile segment with headwaters northwest of the City of Wrightsville in Johnson County is currently listed on the 303(d) list in the State of Georgia for violating the water quality standard for fecal coliform bacteria. The Ohoopee River (Neels Creek to the Little Ohoopee River), lying in Johnson and Emanuel counties, is in the Upper Altamaha River Basin and eventually flows into the Altamaha River. The 18-mile segment with headwaters north of the City of Adrian in Johnson County is on the 303(d) list for fecal coliform also. Big Cedar Creek, lying in Johnson County, is in the Upper Altamaha River Basin and eventually flows into the Ohoopee River. The 3-mile segment with headwaters in Johnson County southeast of the City of Wrightsville, is currently listed on the 303(d) list in

the State of Georgia for violating the water quality standard for fecal coliform as well.

The presence of fecal coliform bacteria in aquatic environments indicates that the water has been contaminated with the fecal material of man or other animals. At the time this occurred, the source water might have been contaminated by pathogens or disease producing bacteria or viruses, which can also exist in fecal material. Some waterborne pathogenic diseases include typhoid fever, viral and bacterial gastroenteritis and hepatitis A. The presence of fecal contamination is an indicator that a potential health risk exists for individuals exposed to this water. Fecal coliform bacteria may occur in ambient water as a result of the overflow of domestic sewage or non-point sources of human and animal waste.

The U.S. Clean Water Act requires a TMDL, or Total Maximum Daily Load, to be established for each pollutant in every body of water on the 303(d) list. A TMDL is a calculation of the maximum amount of pollutant, from both point and non-point sources, that a water body can receive and still adhere to the minimum water quality standard developed by the State of Georgia. The United States Department of Interior-Geological Survey (USGS) and the Georgia Environmental Protection Division (GAEPD) gathered samples from the Ohoopee River (Dyers Creek to Big Cedar Creek) beginning in January of 1999 through December of 1999. The GAEPD tested samples to detect the level of fecal coliform. For the months of May through October, fecal coliform should not exceed a geometric mean of 200 counts per 100ml on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. In the months of November through April, fecal coliform should not exceed a geometric mean of 1,000 colonies per 100ml, based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours, and not to exceed a maximum of 4,000 colonies per 100ml for any sample. The data gathered indicated two exceedances of the fecal coliform level during the months of May through October geometric mean standard of 200 colonies per 100ml in the Ohoopee River (Dyers Creek to Big Cedar Creek). In 2000, the 15-mile segment of the Ohoopee River was placed on the 303(d) list.

Also, the GAEPD tested samples to detect the level of fecal coliform in the Ohoopee River (Neels Creek to the Little Ohoopee River) from January through December of 1999. For the months of May through October, fecal coliform should not exceed 400 counts per 100ml on any given sample collected from a given sampling site. In the months of November through April, fecal coliform should not exceed 4,000 colonies per 100ml, on any given sample collected from a given sampling site. The data gathered indicated two exceedances of the fecal coliform level during the months of May through October for the 18-mile segment. Due to a lack of sufficient sampling data during the period, a more generous standard for fecal coliform was utilized for the Ohoopee River (Neels Creek to the Little Ohoopee River). Normally, the standard for the months for May through October

is 200 colonies per 100ml. For the months of November through April, the normal standard is 1,000 colonies per 100ml. In 2000, the 18-mile segment of the Ohoopee River (Neels Creek to the Little Ohoopee River) was placed on the 303(d) list.

Likewise, the GAEPD also tested samples to detect the level of fecal coliform in Big Cedar Creek from January through December of 1999. The GAEPD tested samples to detect the level of fecal coliform. For the months of May through October, fecal coliform should not exceed a geometric mean of 200 counts per 100ml on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. In the months of November through April, fecal coliform should not exceed a geometric mean of 1,000 colonies per 100ml, based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours, and not to exceed a maximum of 4,000 colonies per 100ml for any sample. The data gathered indicated one exceedance of the fecal coliform level during the months of May through October geometric mean standard of 200 colonies per 100ml in Big Cedar Creek. In 2000, the 3-mile segment of Big Cedar Creek was placed on the 303(d) list.

The purpose of the implementation plan is to identify the actions that must be taken in the future to decrease the level of fecal coliform in the Ohoopee River (Dyers Creek to Big Cedar Creek) by 95.2%, Ohoopee River (Neels Creek to the Little Ohoopee River) by 90.8%, and Big Cedar Creek by 83.1%, through reducing the amount of bacteria entering the streams. This should improve the water quality and better enable the water bodies to meet the state water quality standard.

Plan Preparation

The implementation plan was developed by the Heart of Georgia Altamaha RDC with the assistance of a watershed committee comprised of stakeholder representatives from the forestry industry, agriculture, the Georgia Forestry Commission, the Ohoopee and Central Georgia Soil and Water Conservation Districts, Cooperative Extension Service, the Canoochee RiverKeeper, the Pine Country R C & D, the NRCS, the Emanuel and Johnson County Commissions, two mayors, and the local presidents of Farm Bureau. The Heart of Georgia Altamaha RDC was in charge of drafting the plan under a contract signed with the GA EPD to prepare a TMDL Implementation Plan. A preliminary copy of the plan and planning process was discussed and a presentation was given at the initial watershed committee meeting on June 26, 2003 at the Johnson County Courthouse. Along with the watershed committee, landowners with 500 acres or more of property within two miles of either side of the creeks were invited to attend this initial committee meeting to give comments.

A meeting to educate the public and receive further stakeholder input by discussing and reviewing the draft plan took place with a presentation at the

Johnson County Courthouse in Wrightsville, GA on July 22, 2003. At this meeting, any landowners who owned 25 acres or more of property within two miles of either side of the water bodies were sent a letter informing and inviting them to the public meeting. Fourteen persons attended this meeting. Public comments were solicited and input was placed into the plans. The plan addresses the steps that will be taken in the future to improve the water quality standard. The plan provides for monitoring and implementation actions to achieve goals submitted on the TMDLs. A draft of the final plans was mailed to the watershed stakeholder committee on August 8, 2003, for solicitation of comments before final submittal to EPD.

TMDL Data and Potential Sources of Pollution

In January 1999, the USGS and the GAEPD began a follow-up sampling and monitoring study as a part of a five-year River Basin Planning cycle (Georgia EPD). The United States Department of Interior-Geological Survey (USGS) and the Georgia Environmental Protection Division (GAEPD) gathered samples from the Ohoopee River (Dyers Creek to Big Cedar Creek) beginning in January of 1999 through December of 1999. The GAEPD tested samples to detect the level of fecal coliform. For the months of May through October, fecal coliform should not exceed a geometric mean of 200 counts per 100ml on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours. In the months of November through April, fecal coliform should not exceed a geometric mean of 1,000 colonies per 100ml, based on at least four samples collected from a given sampling site over a 30-day period at intervals not less than 24 hours, and not to exceed a maximum of 4,000 colonies per 100ml for any sample. The data gathered indicated two exceedances of the fecal coliform level during the months of May through October geometric mean standard of 200 colonies per 100ml in the Ohoopee River (Dyers Creek to Big Cedar Creek). In 2000, the 15-mile segment of the Ohoopee River was placed on the 303(d) list.

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The Ohoopee River (Dyers Creek to Big Cedar Creek) watershed consists primarily of forest and cropland, with minimal areas of pasture and wetlands. Of the 50,543 acres that make up the impaired segment, 37 percent is comprised of forest. Another 35 percent is cropland. The Ohoopee River (Neels Creek to the Little Ohoopee River) watershed consists primarily of forest and cropland as well, with minimal areas of pasture and wetlands. Of the 190,435 acres that make up the impaired segment, 48 percent is comprised of forest. Another 29 percent is cropland. The Big Cedar Creek watershed also consists primarily of forest and cropland, with minimal areas of pasture and wetlands. Of the 32,198 acres that make up the impaired segment, 41 percent is comprised of forest. Another 35 percent is cropland. Urban non-point sources were identified by EPD as a possible primary source of the fecal coliform. One of the sources is the general storm water runoff that originates from the cities of Wrightsville and Adrian. This is the runoff from construction, streets, and residential areas that results from rainfall. Also, there is a point source with an NPDES permit that is a possible contributor to the problem of fecal coliform in these water bodies. In Big Cedar Creek, The City of Wrightsville WPCP (#GA0032395) has an NPDES permit.

As mentioned in the introduction, a number of illegal dumping sites exist within the watershed. Many locals noted that these dump sites include items such as dirty diapers, appliances, and other household materials. Locals also pointed out a green – box site in the watershed at Johnson’s Bridge, located on the Ohoopee River, where it has been made known to the commissioners. Also, locals noted a number of deer carcasses that are frequently dumped in the water bodies.

Along with the illegal dumpsites, locals believe that the fecal coliform problem in the watershed is the possible result of runoff from septic tanks in the watershed. Although the City of Wrightsville provides sewer service; the City of Adrian does not.

Locals also mentioned the large number of beaver dams in the watershed. As mentioned in the introduction, the erection by beavers of large dams has been a continuous problem. In addition, the presence of the beavers also raises the possibility of an additional contributor of non-point source pollution. The beaver dams tend to aggravate the situation by further restricting the stream's ability to flow, thus allowing fecal coliform bacteria to grow on top of one another in the isolated pools of water that form as a result of the dams.

Finally, locals pointed out the minimal flow of streams in the watershed. They noted that many of the streams did not begin to flow from the drought again until 2001. Locals felt that the minimal testing that was conducted in 1999 makes them unsure if there is really a problem at all. Locals expressed a definite concern to increase the amount of testing that is done. They also felt that the amount of rainfall needs to be taken into consideration when determining if there is really a problem.

Regulatory and Voluntary Measures: Existing and Future

Septic tank maintenance ordinances are an effective way to curtail urban and residential runoff. In Emanuel and Johnson counties, such ordinances are not in effect, though septic tank installations are regulated. It is important that future septic tank regulations, particularly relating to post-construction maintenance, be implemented at the local level. Future use of residential BMPs should also be explored as a practical means of limiting residential runoff. The local Cooperative Extension office can help individual homeowners assess and utilize BMPs through its Home*A*Syst Program.

Public education measures, beginning with the TMDL Implementation Plans and continuing in the future concerning Best Management Practices, are an efficient way to reach the local citizenry. Agriculture BMPs include, but are not limited to, the use of a waste storage structure, conservation tillage, waste storage pond, diversion, fencing, filter strips, stock trails/walkways, stream/shoreline protection, nutrient management, and well protection. Farmers utilize some of the agriculture BMPs currently; however, many do not practice them, and some do not know how to define a BMP. The NRCS and the Pine Country RC&D continue to work with farmers by educating them and providing them with the proper resources/information to enable them to install current and future BMPs. Cooperative Extension can also provide individually tailored assistance with BMPs through its Farm*A*Syst Program.

The use of forestry BMPs are becoming more prevalent, however, some landowners continue to ignore forestry BMPs. The Georgia Forestry Commission has and continues to make a conscious effort to educate and monitor BMPs by aerial surveillance. Some forestry BMP categories include, but are not limited to, harvesting in SMZ's, mechanical site preparation, chemical site preparation, fertilization, firebreaks, skid trail stream crossings and road crossings, and logging roads. The State Implementation Committee of the forest industry's

Sustainable Forestry Initiative can lend valuable support/assistance. It is unlikely that forestry contributes to any fecal coliform problems. To the contrary, more forested buffers of streams could help prevent such contamination.

Currently, the City of Wrightsville does have planning and zoning regulations in place within the city limits. However, the City of Adrian does not have any planning and zoning regulations in place at this time. Emanuel and Johnson counties currently do not have any planning and zoning regulations in the unincorporated areas as well. Emanuel and Johnson counties enforce erosion and sedimentation control measures at the state level. However, there are no erosion and sedimentation measures enforced at the local level.

The implementation of Land Use Management Regulations is planned in the future on a county-by-county basis. The regulations will be put into place as the necessary support at the local level is obtained. They will be enforced by local governments, GA DNR, GA Department of Human Resources, GA Department of Community Affairs, and the GA Forestry Commission. The regulations would utilize state-mandated environmental planning criteria, local planning and zoning ordinances, BMPs for agriculture and forestry, erosion and sedimentation measures, and septic tank permitting to manage runoff and development. The Heart of Georgia Altamaha RDC will provide technical assistance in developing a “zoning lite” ordinance to encourage local governments to implement planning and zoning measures.

Storm Water Management Regulations are planned for implementation in the future as well on a county-by-county basis. The new regulations will be put into effect as requisite local support is obtained, and the GA DNR, GA EPD, and local governments will enforce them. The regulations would utilize local ordinance enforcement to produce better erosion and sedimentation control at the time of construction. These regulations could possibly require post-construction erosion and sedimentation control and possibly utilize passive design elements in new developments and stream buffers to prevent runoff.

A Cooperative Monitoring Program is needed for future implementation. The GA DNR, GA EPD, local governments, and possibly local volunteers would conduct the program. Additional regular monitoring of the creeks is needed to better define pollutant sources. The program could also consist of a scientific study of issues such as fecal coliform levels in slow-moving blackwater streams, and other potential issues such as the correlation of sampling results to rainfall and the standards themselves. It also could possibly seek funding and cooperation for watershed assessments, including possible model demonstration assessments for small watersheds, and develop a program for implementation assessments for the watershed.

An implementation of an Adopt-A-Stream program is needed. The program would be utilized through various organizations and groups throughout the

watershed. The program will provide updates on current stream conditions in the future as the requisite funding and support are developed.

Schedule for Implementation
BMPs for the agriculture and forestry community will be promoted beginning in 2003 and continuing. The schedule for implementing the Land Use Management Regulations and the Storm Water Management Regulations is on a county-by-county basis in the near future, as local support is obtained. It would be helpful if the Cooperative Monitoring Program could be implemented in 2004, pending funding. An Adopt-A-Stream Program would also be helpful if implemented by 2004, pending local support and funding.

Monitoring Plan
The GA Forestry Commission will continue to do aerial and land surveillance of the watershed area. It is possible for Adopt-A-Stream monitoring to begin to take place in the future, as the requisite funding and support are developed.

Funding
The GA Forestry Commission will continue to do aerial and land surveillance of the watershed area. Also, the Georgia Forestry Commission will continue to administer Best Management Practices Assurance Examinations. The U.S. Fish and Wildlife Service is funding a program called “Partners for Wildlife,” which is sponsored through the GA Soil and Conservation Service. Also, some funding will originate from the USDA through the Farm Service Agency and the Natural Resource Conservation Service. The UGA Cooperative Extension Service is funding two programs; Home*A*Syst and Farm*A*Syst, which are enacted by the local agriculture extension agent offices. Finally, the State Implementation Committee (SFI) is funding a program called “Sustainable Forestry Initiative.” The National Fish and Wildlife Foundation is funding a program called the General Grant Challenge Program. The Georgia Department of Natural Resources Wildlife Resources Division has produced two booklets that are available to the public, “Small Game Management in Georgia” and “Beaver Management and Control in Georgia.” Additional state and federal funding is likely needed to establish more in-depth monitoring.

Criteria to Determine Progress
The criteria to determine whether progress toward attainment is being made will be shown through the results of future monitoring by any improved fecal coliform levels through reducing the amount of bacterial loading in the water bodies.

Conclusion
Improved future utilization and implementation of best management practices at the agricultural, residential, and urban levels will provide substantial progress in reducing the levels of fecal coliform bacteria in the water bodies. The examination of potential non-point sources would be helpful. A more in-depth monitoring program would better define the true nature and extent of the

problems. Any action(s) taken as a result of such an examination would further assist in producing progress. We anticipate the removal of the Ohoopee River (Dyers Creek to Big Cedar Creek), Ohoopee River (Neels Creek to the Little Ohoopee River), and Big Cedar Creek from the State of Georgia's 303(d) list.

STATE OF GEORGIA

TMDL IMPLEMENTATION PLAN
WATERSHED APPROACH
Altamaha River Basin

Local Watershed Governments

Heart of Georgia-Altamaha RDC
County of Johnson
County of Emanuel
County of Treutlen
County of Washington
City of Wrightsville
City of Adian

TMDL Implementation Plans are platforms for establishing a course of actions to restore the quality of impaired water bodies in a watershed. They are intended as a continuing process that may be revised as new conditions and information warrant. Procedures will be developed to track and evaluate the implementation of the management practices and activities identified in the plans. Once restored, appropriate management practices and activities will be continued to maintain the water bodies.

This Implementation Plan addresses an action plan, education/outreach activities, stakeholders, pollutant sources, and potential funding sources affecting the sub-basin. In addition, the Plan describes (a) regulatory and voluntary practices/control actions (*management measures*) to reduce target pollutants, (b) milestone schedules to show the development of the management measures (*measurable milestones*), (c) a monitoring plan to determine the efficiency of the management measures and measurable milestones, and (d) criteria to determine whether substantial progress is being made towards reducing pollutants in impaired waterbodies. The overall goal of the Plan is to define a set of actions that will help achieve water quality standards in the state of Georgia. Following this section is information regarding individual segments.

Ohoopee River/Big Cedar Creek Watershed
0307010701

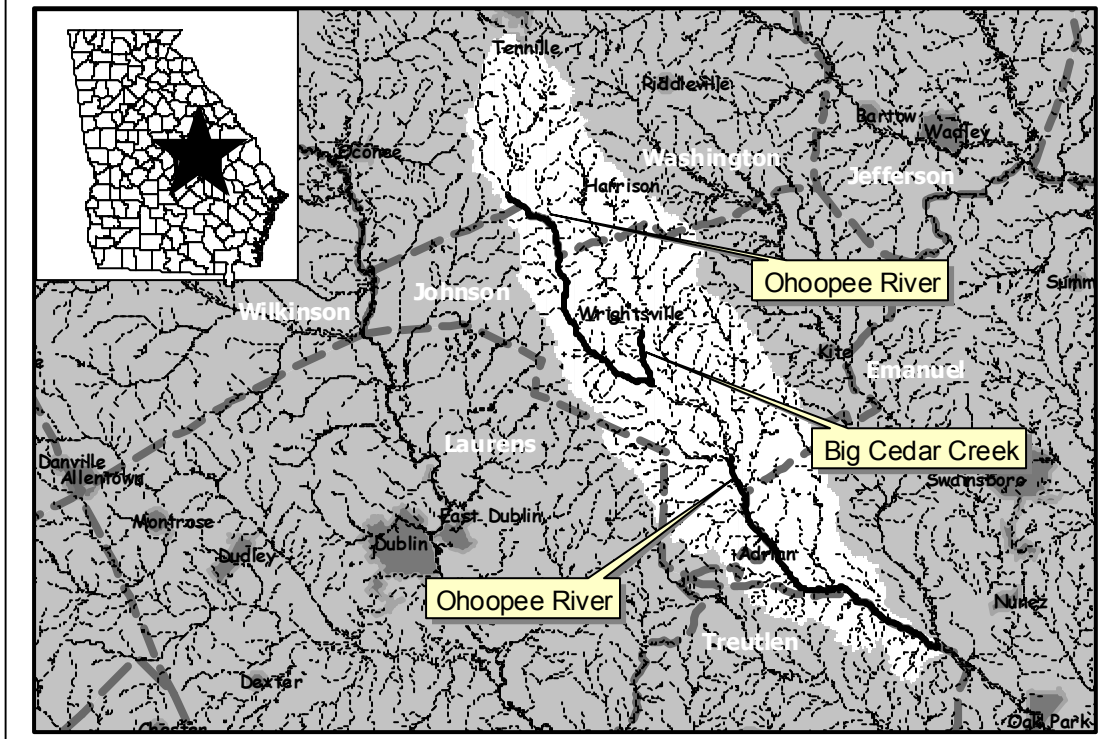


FIGURE 1

Impaired Waterbody*	Impaired Stream Location	Impairment
1. Big Cedar Creek	Little Cedar Creek to Ohoopee River	Fecal Coliform
2. Ohoopee River	Neels Creek to Little Ohoopee River	Fecal Coliform
3. Ohoopee River	Dyers Creek to Big Cedar Creek	Fecal Coliform

*These Waterbody Numbers are referenced throughout the Implementation Plan.

Ohoopee River/Big Cedar Creek
Watershed 0307010701

POLLUTANT:	SOURCE:	EFFECT:	WHAT CAN I DO?	
			At Home: Community, School	At Work: Business, Government
__ Dissolved Oxygen (DO) X Fecal Coliform (FC) __ Sediment __ Metals __ Fish Consumption Guidelines (FCG) __ Other (Please List)	__ Industrial X Urban X Agriculture __ Forestry X Residential __ Other (Please List)	__ Habitat __ Recreation __ Drinking Water __ Aesthetics X Other (Please List) Fishing	Get Involved in Adopt-A-Stream Public Education Use Proper BMPs Check Septic System	Develop Zoning Ordinances Dispose of Harmful Chemicals Properly

Education/Outreach Activities

Responsible Org. Or Entity	Description	Impacted Waterbodies*	Target Audience	Anticipated Dates (MM/YY)
Heart of Georgia Altamaha RDC	TMDL Presentation at the Johnson County Commissioners Meeting Room for the committee	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Local Governments, Agriculture Organizations, Georgia Forestry Commission, Forestry Industries, Central GA and Ohoopee Soil and Water Conservation District, Natural Resource Conservation Service, Pine Country RC & D, Canoochee RiverKeeper	June 26, 2003
Heart of Georgia Altamaha RDC	TMDL Presentation at Treutlen County Commissioners Meeting	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	County Officials	July 1, 2003
Heart of Georgia Altamaha RDC	A Press Release to The Johnson Journal concerning Public Meeting (July 11, 2003)	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	General Public	July 11, 2003
Heart of Georgia Altamaha RDC	A Press Release to The Soperton News concerning Public Meeting (July 11, 2003)	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	General Public	July 11, 2003
Heart of Georgia Altamaha RDC	A Press Release to The Forest Blade concerning Public Meeting (July 11, 2003)	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	General Public	July 11, 2003
Heart of Georgia Altamaha RDC	A Public Service Announcement to The Radio Group in Swainsboro, GA	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	General Public	July 14, 2003
Heart of Georgia Altamaha RDC	TMDL Presentation at City of Stillmore City Council Meeting	Upper Ohoopee River (Neels Creek to the Little Ohoopee River)	City Officials	July 14, 2003
Heart of Georgia Altamaha RDC	TMDL Presentation at City of Soperton City Council Meeting	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	City Officials	July 21, 2003
Heart of Georgia Altamaha RDC	TMDL Presentation for Public Meeting at the Johnson County Courthouse in Wrightsville, GA	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Landowners with 25 Acres or more within 2 miles on either side of Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	July 22, 2003
Heart of Georgia Altamaha RDC	TMDL Presentation at City of Wrightsville City Council Meeting	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	City Officials	August 11, 2003
Heart of Georgia Altamaha RDC	TMDL Presentation at Johnson County Commissioners Meeting	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	County Officials	August 11, 2003
Heart of Georgia Altamaha RDC	TMDL Presentation at City of Swainsboro City Council Meeting	Upper Ohoopee River (Neels Creek to the Little Ohoopee River)	City Officials	August 18, 2003
Heart of Georgia Altamaha RDC	TMDL Presentation at Emanuel County Commissioners Meeting	Upper Ohoopee River (Neels Creek to the Little Ohoopee River)	County Officials	September 2003
Heart of Georgia Altamaha RDC	TMDL Presentation at City of Nunez City Council Meeting	Upper Ohoopee River (Neels Creek to the Little Ohoopee River)	City Officials	September, 2003
Heart of Georgia Altamaha RDC	TMDL Presentation at City of Adrian City Council Meeting	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	City Officials	October, 2003
Heart of Georgia Altamaha RDC	TMDL Presentation at City of Oak Park City Council Meeting	Upper Ohoopee River (Neels Creek to the Little Ohoopee River)	City Officials	November, 2003

STAKEHOLDERS

EPD encourages public involvement and the active participation of stakeholders in the process of improving water quality. Stakeholders can provide valuable information and data regarding their community and the impaired water bodies and can provide insight and/or implement management measures.

List of local governments, agricultural organizations or significant landholders, commercial forestry organizations, businesses and industries, and local organizations including environmental groups and individuals with a major interest in this watershed.

Name/Organization	Address	City	State	Zip	Phone	E-Mail
Emanuel County Cooperative Ext. Service	129 North Anderson Drive	Swainsboro	GA	30401	(478)-237-1226	
Emanuel County Commissioners	PO Box 787	Swainsboro	GA	30401	(478)-237-3881	
Natural Resource Conservation Service	145 N. Anderson Drive	Swainsboro	GA	30401	(912)-237-8866	
Rayonier Southeast Forest Products	PO Box 626	Jesup	GA	31598	(912)-530-8471	
Pine Country RC & D	105 Martin Luther King JR Drive	Soperton	GA	30457	(912)-529-6652	
International Paper	RT 2 Box 2	Soperton	GA	30457	(912)-529-3447	
Canoochee RiverKeeper	PO Box 263	Swainsboro	GA	30401	(478)-289-6523	
Ohoopee Soil and Water Conservation District	618 Bird Flanders Road	Swainsboro	GA	30401	N/A	
City of Adrian	PO Box 265	Adrian	GA	31002	(478)-668-3376	
Johnson County Commissioners	PO Box 269	Wrightsville	GA	31096	(478)-864-3388	
Johnson County Cooperative Ext. Service	515 West Elm Street	Wrightsville	GA	31096	(478)-864-3373	
Natural Resource Conservation Service	114 Smith Street	Tennille	GA	31089		
Emanuel County Farm Bureau	PO Box 450	Swainsboro	GA	30401	N/A	
Johnson County Farm Bureau	PO Box 287	Wrightsville	GA	31096	N/A	
Georgia Forestry Commission	119 Highway 49	Milledgeville	GA	31061	(478)-445-5164	
City of Wrightsville	190 East Elm Street	Wrightsville	GA	31096	(478)-864-3303	
Central Savannah River Area RDC	3023 Riverwatch Parkway	Augusta	GA	30907	(706)-210-2000	
Central GA Soil and Water Conservation District	RT 1 Box 925	Wrightsville	GA	31096	N/A	

WATER BODIES/STREAMS COVERED IN THIS PLAN:

These impaired streams are located in the same sub-basin identified by a HUC10 code. Most of the information contained in this section comes from the 303(d) list and has been completed by employees of the EPD Water Protection Branch. Data that placed stream on 303(d) list will be provided upon request.

Waterbody Name #1	Location	Miles/Area Impacted	Use Classification	Partially Supporting/ Not Supporting (PS/NS)
Big Cedar Creek	Little Cedar Creek to Ohoopee River	3	Fishing	NS

Primary County	Secondary County	Second RDC	Source (Point/ Nonpoint)
Johnson			Nonpoint

Pollutants	Water Quality Standards	Required Reduction	TMDL ID	Date TMDL Established
Fecal Coliform	1000/100 ml (geometric mean Nov. – April) 200/100 ml (geometric mean May – Oct.)	83.1 %		January 2002

Waterbody Name #2	Location	Miles/Area Impacted	Use Classification	Partially Supporting/ Not Supporting (PS/NS)
Ohoopee River	Neels Creek to Little Ohoopee River	18	Fishing	PS

Primary County	Secondary County	Second RDC	Source (Point/ Nonpoint)
Johnson	Emanuel, Treutlen		NP

Pollutants	Water Quality Standards	Required Reduction	TMDL ID	Date TMDL Established
Fecal Coliform	1000/100 ml (geometric mean Nov. – April) 200/100 ml (geometric mean May – Oct.)	90.8 %		January 2002

Waterbody Name #3	Location	Miles/Area Impacted	Use Classification	Partially Supporting/ Not Supporting (PS/NS)
Ohoopee River	Dyers Creek to Big Cedar Creek	15	Fishing	NS

Primary County	Secondary County	Second RDC	Source (Point/ Nonpoint)
Johnson	Washington		Nonpoint

Pollutants	Water Quality Standards	Required Reduction	TMDL ID	Date TMDL Established
Fecal Coliform	1000/100 ml (geometric mean Nov. – April) 200/100 ml (geometric mean May – Oct.)	95.2 %		January 2002

POLLUTANT SOURCES

It is important to recognize the potential source(s) causing water quality impairment. Each source must be controlled to comply with target TMDL/Load Allocations for each pollutant. Included is a description of how the sources contribute to the impairment and the waterbody that is impaired.

List of major nonpoint source categories and sub-categories or individual sources (Urban Runoff, Agriculture, Forestry, Municipal Sewage Treatment Plant)

Pollutant	Sources of Pollutants	Description of Contribution To Impairment	Impacted Waterbodies*
Fecal Coliform	Agriculture	Possible introduction of animal waste from upslope practices and sediment from storm water runoff when BMPs are not followed	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
Fecal Coliform	Residential	Possible introduction of discharges resulting from septic tank runoff and littering from nearby residential areas, including the cities of Adrian (Upper Ohoopee River ((Neels Creek to the Little Ohoopee River)) and Wrightsville (Big Cedar Creek)	Upper Ohoopee River (Neels Creek to the Little Ohoopee River) and Big Cedar Creek
Fecal Coliform	Municipal (Storm water Runoff)	Possible introduction of storm water runoff from municipal areas (cities of Adrian and Wrightsville)	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
Fecal Coliform	Urban	Possible introduction of water runoff from urban development in and near cities of Adrian and Wrightsville	Upper Ohoopee River (Neels Creek to the Little Ohoopee River) and Big Cedar Creek
Fecal Coliform	Municipal (Wastewater)	Possible introduction of wastewater discharges from City of Wrightsville (#GA0032395)	Big Cedar Creek

MANAGEMENT MEASURES, MEASURABLE MILESTONES AND SCHEDULE

(i.e. Local codes and ordinances, Erosion and Sedimentation Control, Storm Water Management, Local water resource monitoring)

The following table lists management measures that have been or will be implemented to achieve water quality standards and the load reductions established in the TMDL. The management measures, including regulatory or voluntary actions or other controls by governments or individuals, specifically apply to the pollutant and the waterbody for which the TMDL was written. A description is provided of how these management measures are/will be accomplished through reliable and effective delivery mechanisms, and how these management measures are/will help achieve the target TMDL. Included is the source of the pollutant, anticipated/past effectiveness of the management measure (very effective, somewhat effective, not effective), the current status (i.e. enforced, in-progress, planning), and measurable milestones and schedule. Milestones are used to measure progress in attaining water quality standards and to determine whether management measures are being implemented.

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory /Voluntary
Georgia Water Quality Control Act (OCGA 12-5-20)	Georgia DNR, EPD	Makes it unlawful to discharge excessive pollutants into waters of the state in amounts harmful to public health, safety or welfare, animals, or the physical destruction of stream habitat	1964	Current	Regulatory

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal Coliform	Agriculture, Residential, Municipal	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Effective in point source pollution in dealing with local governments and industry/ Limited effectiveness in dealing with non-point sources

Measurable Milestones	Schedule		Comments
	Start	End	
Land Use Application System Permits NPDES Permits	1964	Ongoing	Work with local governments and others to increase monitoring of Land Use Application System Permits and NPDES Permits/City of Wrightsville WPCP NPDES Permit #GA0032395

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory /Voluntary
Agricultural BMPs	Georgia Soil and Water Conservation Service, Georgia Department of Agriculture	Leads effort in agricultural water quality program, develops agricultural BMP educational and monitoring efforts	1987	Current	Voluntary

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal Coliform	Pesticide management, animal facility runoff, irrigation water management	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Utilization of BMPs has been found to be effective in controlling runoff and other contaminants from farming practices

Measurable Milestones	Schedule		Comments
	Start	End	
Waste Storage Structure, Conservation Tillage, Waste Storage Pond, Diversion, Fencing, Field Borders, Filter Strips, Stock Trails/Walkways, Stream/Shoreline Protection, Nutrient Management, Well Protection, Land Use Application System Permits and NPDES Permits	1987	Ongoing	Additional BMPs possible depending on results of future monitoring/ Work with local governments and others to increase monitoring of Land Use Application System Permits and NPDES Permits

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory /Voluntary
Nutrient Application Plan	Natural Resource Conservation Service	Leads effort in agricultural water quality by developing plans to control nutrient runoff	2000	Current	Voluntary

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal Coliform	Pesticide management, irrigation water management	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Effective in the initial stages of the program's beginning if plans are followed properly

Measurable Milestones	Schedule		Comments
	Start	End	
Increase the number of farming establishments utilizing nutrient application plans to limit nutrient runoff	2000	Ongoing	Plans will continue to be effective at the local level if they continue to be implemented by more and more farming establishments

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory /Voluntary
Comprehensive Nutrient Management Plan (CNMP)	Agriculture Extension Service, Department of Natural Resources	Leads effort in agricultural water quality by developing plans to control animal waste runoff	2001	Current	Regulatory

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal Coliform	Animal facility runoff	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Effective in the initial stages of the program's beginning if the plans are carried out properly

Measurable Milestones	Schedule		Comments
	Start	End	
Increase the number of farming establishments implementing plans/Encourage increased compliance with plan requirements	2001	Ongoing	Plans will continue to be effective at the local level if they continue to be implemented by more and more farming establishments

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory /Voluntary
Georgia Erosion and Sedimentation Control Act (OCGA 12-7-1)	Georgia Department of Natural Resources Environmental Protection Division and Local Governments	Authorizes local governments to adopt a comprehensive ordinance governing land-disturbing activities within local planning and zoning jurisdictions and require the use of BMPs	Amended 2000	Current	Regulatory

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal Coliform	Agricultural, Residential, Municipal	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Effectiveness is minimal due to a lack of local enforcement of erosion and sedimentation control measures

Measurable Milestones	Schedule		Comments
	Start	End	
Local erosion and sedimentation control measures	2003	Ongoing	Work with local governments to obtain a greater enforcement of erosion and sedimentation control measures at the local level

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory /Voluntary
Georgia Planning Act (OCGA 12-2-8)	Georgia Department of Natural Resources and Local Governments	Authorized DCA to develop minimum planning standards and procedures that local government planning and zoning jurisdictions could adopt and enforce pertaining to the protection of river corridors, mountains, water supply watersheds, groundwater recharge areas, and wetlands	1989	Current	Regulatory

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal Coliform	Agricultural, Residential, Municipal	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Effectiveness is minimal because of lack of land use management regulations at the local level

Measurable Milestones	Schedule		Comments
	Start	End	
Land Use Management Regulations	2003	Ongoing	Need to work with local governments to establish land use management regulations and other regulations as appropriate/ Need to work with local governments in enforcing DNR's Part 5 Environmental Planning criteria to better protect local streams

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory /Voluntary
Local Septic Tank Permit Ordinance	Georgia Department of Human Resources and Local Governments	Authorizes the regulation of septic tanks, including placement, installation and maintenance	1969	Current	Regulatory

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal Coliform	Residential	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Effective at point of construction and poor at point of post-construction follow up maintenance

Measurable Milestones	Schedule		Comments
	Start	End	
Continuous updating of health inspector manual to upgrade current standards	1969	Ongoing	Better enforcement at local level needed

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory /Voluntary
Land Use Management Regulations	Heart of Georgia Altamaha Regional Development Center, Local Governments, Georgia Department of Natural Resources, Georgia Department of Human Resources, Georgia Department of Community Affairs, Georgia Forestry Commission	Utilize state-mandated environmental planning criteria, local planning and zoning ordinances, BMPs for agriculture and forestry, and septic tank permitting to manage runoff and development, RDC will provide technical assistance in developing a model "zoning-lite" ordinance to encourage local governments to implement planning and zoning measures	Adopted on a County-by-County basis	Planned	Regulatory

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal Coliform	Agricultural, Residential, Municipal	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Not very effective due to lack of Land Use Regulations on county-wide level

Measurable Milestones	Schedule		Comments
	Start	End	
Establishment of County-wide Land Use Regulations	2008	Ongoing	There is a need to work with local governments to adopt Land Use Regulations

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory /Voluntary
Cooperative Monitoring Program	Georgia Department of Natural Resources, Georgia Environmental Protection Division, Local Governments, Heart of Georgia Altamaha Regional Development Center	Seek a scientific study of issues such as natural dissolved oxygen levels in slow-moving streams, could seek funding/cooperation for watershed assessments including possible model demonstration assessments for small watersheds, develop a program for implementation assessments for the Upper Ohoopee River Watershed Cluster (includes Upper Ohoopee River ((Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River)) and Big Cedar Creek)		Planned	Voluntary

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal Coliform	Agricultural, Residential, Municipal	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Anticipated effectiveness is significant because of more frequent monitoring which will produce better and more frequent data

Measurable Milestones	Schedule		Comments
	Start	End	
Implementation of Adopt-A-Stream programs with various organizations for purposes of more sampling/Additional monitoring to increase the amount of data collected	2003	Ongoing	Utilize monitoring programs of Georgia Forestry Commission, NRCS, Adopt-A-Stream to gather updated sampling data on a more frequent basis

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory /Voluntary
Environmental Code Enforcement	Local Governments, Department of Natural Resources, Environmental Protection Division	Utilize local ordinances to ensure greater compliance with state environmental codes at the local level	2008	Planned	Regulatory

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal Coliform	Residential	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Limited effectiveness due to lack of enforcement at county-wide level

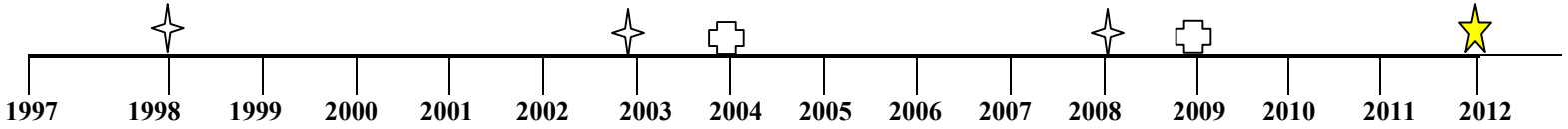
Measurable Milestones	Schedule		Comments
	Start	End	
Establishment of code enforcement program	2008	Ongoing	Greater enforcement of state standards at the local level could help to reduce the amount of man made wastes entering into local streams

POTENTIAL FUNDING SOURCES The identification and discussion of dedicated funding is important in determining the economic feasibility of the above-mentioned management measures.

Funding Source	Responsible Authority	Status	Anticipated Funding Amount	Impacted Waterbodies*
Georgia Forestry Commission	Georgia Forestry Commission	Current	Unknown	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
Georgia Department of Natural Resources	Environmental Protection Division	Current	$75,000.00	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
U.S. Environmental Protection Agency	U.S. Environmental Protection Agency	Planned	Unknown	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
U.S. Department of Agriculture	Farm Service Agency	Planned	Unknown	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
U.S. Department of Agriculture	Natural Resource Conservation Service	Planned	Unknown	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
U.S. Fish and Wildlife Service	Georgia Soil and Water Conservation Service (“Partners for Wildlife” Program)	Planned	Unknown	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
University of Georgia Extension Service	Local Cooperative Extension Service (Home*A*Syst Program)	Planned	Unknown	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
University of Georgia Extension Service	Local Cooperative Extension Service (Farm*A*Syst Program)	Planned	Unknown	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
State Implementation Committee	Sustainable Forestry Initiative Program	Planned	Unknown	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
Georgia Forestry Commission	Georgia Forestry Commission (Best Management Practices Assurance Examinations)	Current	Unknown	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
The National Fish and Wildlife Foundation	The National Fish and Wildlife Foundation (General Challenge Grant Program)	Planned	Unknown	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek
Georgia Department of Natural Resources (Wildlife Resources Division)	Georgia Department of Natural Resources (Wildlife Resources Division) “Small Game Management in Georgia” & “Beaver Management and Control in Georgia” Booklets	Current	Unknown	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek

PROJECTED ATTAINMENT DATE

The projected date to attain and maintain water quality standards in this watershed is 10 years from acceptance of the TMDL Implementation Plan by EPD.



EPD Monitoring
Evaluate TMDL & Attainment Date
Project Attainment

MONITORING PLAN

The purpose of this monitoring plan is to determine the effectiveness of the target TMDL and the management measures being implemented to meet water quality standards. List of previous, current or planned/proposed sampling activities or other surveys. (Monitoring data that placed stream on 303(d) list will be provided if requested.)

Name Of Regulation / Ordinance Or Management Measure	Organization	Impacted Waterbodies*	Pollutants	Purpose/Description	Time Frame		Status (Previous, Current, Proposed)
					Start	End	
1999 Study	United States Geological Survey	Upper Ohoopee River (Dyers Creek to Big Cedar Creek)	Fecal Coliform	To detect the levels of Fecal Coliform at the USGS Certified Station #02225143 (County Road 239 near Harrison, GA)	1/99	12/99	Previous
1999 Study	United States Geological Survey	Upper Ohoopee River (Neels Creek to Little Ohoopee River)	Fecal Coliform	To detect the levels of Fecal Coliform at the USGS Certified Station #02225175 (US Hwy. 80 near Adrian, GA)	1/99	12/99	Previous
1999 Study	United States Geological Survey	Big Cedar Creek	Fecal Coliform	To detect the levels of Fecal Coliform at the USGS Certified Station #02225157 (County Road 175 near Wrightsville, GA)	1/99	12/99	Previous
Best Management Practices Monitoring	Georgia Forestry Commission	Upper Ohoopee River (Dyers Creek to Big Cedar Creek & Neels Creek to the Little Ohoopee River) and Big Cedar Creek	Fecal Coliform	Within the watershed, can conduct monthly aerial and land reconnaissance to identify recent forestry practices, conduct BMP audit, and make recommendations for remediation if problems are found		On-going	Current

Ohoopee River/Big Cedar Creek
Watershed 0307010701

CRITERIA TO DETERMINE WHETHER SUBSTANTIAL PROGRESS IS BEING MADE

The following set of criteria will be used to determine whether any substantial progress is being made towards reducing pollutants in impaired waterbodies and attaining water quality standards. Discussion on each criteria is recorded in the space provided. Additional relevant criteria are presented in comments.

Percent of concentration or load change (monitoring program) Install BMPs and reduce the amount of fecal coliform by 20% by 2012

If monitoring results show that it is unlikely that the TMDL will be adequate to meet water quality standards, revision of the TMDL may be necessary.

- Categorical change in classification of the stream (delisting the stream is the goal) Classification is proposed to remain fishing/ Delist from 303(d) list

- Regulatory controls or activities installed (ordinances, laws) Work with local governments and individuals to install Erosion and Sedimentation Controls, Land Use Management Regulations (Development Regulations such as stream buffers, limited impervious cover, porous pavement materials, limited clearing, grading, and disturbance); BMPs, Storm Water Management, Code Enforcement, etc. to help reduce runoff and minimize land disturbance.

- Best management practices installed (agricultural, forestry, urban) Agriculture – (Waste Storage Facilities, Conservation Tillage, Waste Storage Pond, Diversion, Fencing, Field Borders, Filter Strips, Stock Trails/Walkways)

COMMENTS

Attachments

Appendix A – Upper Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan Committee Meeting Invitation List (June 26, 2003)

Appendix B – Upper Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan List of Major Landowners Invited to Committee Meeting (June 26, 2003) (Treutlen, Johnson, and Emanuel counties)

Appendix C – Upper Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan Committee and Major Landowners Meeting Sign-in Sheet (June 26, 2003)

Appendix D – Upper Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan Committee and Major Landowners Meeting Handout (June 26, 2003)

Appendix E – Stakeholder Notification List for Upper Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan Public Meeting (July 22, 2003) (Treutlen, Johnson, and Emanuel counties)

Appendix F – Press Release for Public Meeting for Lower Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan in The Johnson Journal (July 11, 2003)

Appendix G – Press Release for Public Meeting for Lower Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan in The Soperton News (July11, 2003)

Appendix H – Press Release for Public Meeting for Lower Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan in The Forest Blade (July 11, 2003)

Appendix I – Public Service Announcement concerning Upper Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan given to The Radio Group in Swainsboro, GA (July 21-22, 2003)

Appendix J – Upper Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan Public Meeting Sign-in Sheet (July 22, 2003)

Appendix K – Upper Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan Public Meeting Handout (July 22, 2003)

Appendix L – Memo to Treutlen Co. Commissioners to be placed in the July 1st, 2003 Meeting Agenda Packet (June 13, 2003)

Appendix M – Memo to City of Stillmore City Council to be placed in the July 14th, 2003 Meeting Agenda Packet (June 12, 2003)

Appendix N – Memo to City of Soperton City Council to be placed in the July 21st, 2003 Meeting Agenda Packet (June 13, 2003)

Appendix O – Memo to Johnson Co. Commissioners to be placed in the August 11th, 2003 Meeting Agenda Packet (Jul 15, 2003)

Appendix P – Memo to City of Wrightsville City Council to be placed in the August 11th, 2003 Meeting Agenda Packet (July 15, 2003)

Appendix Q – Memo to City of Swainsboro City Council to be placed in the August 18th, 2003 Meeting Agenda Packet (July 15, 2003)

Appendix R - Upper Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan Handout for Treutlen and Johnson County Commissioners meetings and Cities of Stillmore, Soperton, Wrightsville, and Swainsboro City Council Meetings

Appendix S – Upper Ohoopee River Watershed Cluster Proposed TMDL Implementation Plan Committee Review Memo (August 8, 2003)

Ohoopee River/Big Cedar Creek
Watershed 0307010701

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Environmental Protection Division of the Department of Natural Resources, State of Georgia.

TOGETHER WE CAN MAKE A DIFFERENCE!